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AR&E Docket No. 96700/613

E UNITED STATES PATENT AND TRADEMARK OFFICE

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Applicant

Maureen J. Charron and Ellen B. Katz

Serial No.

09/516,493

TECH CENTER 1600/2900

Filed

March 1, 2000

**USES THEREOF** 

#11/C Zeta 6-12-02

For

NOVEL GLUCOSE TRANSPORTER/SENSOR PROTEIN AND

Examiner

Sumesh Kaushal, Ph.D.

Group Art Unit :

1633

## REPLY AND AMENDMENT UNDER 37 C.F.R. 1.111

Commissioner for Patents Washington, D.C. 20231

Box Non-Fee Amendment

"Express Mail" mailing label No.EV 034640586 US. Date of Deposit: June 3, 2002

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner for Patents, Washington, D.C. 20231. Name: Elie H. Gendloff.

Signature:

Sir:

This Reply and Amendment is in response to the Office Action dated March 1, 2002 in the above-identified case. Since this Reply is due June 1, 2002, which was a Saturday, this Reply is timely filed on June 3, 2002.

## **Amendment**

Please cancel claims 1-16, 19-21 and 25-29 without prejudice or disclaimer and substitute therefor the following claims 30-58.

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ત્રુધ 36. (New) An isolated nucleic acid sequence, the sequence comprising at least 1362 nucleotides, that hybridizes under high stringency conditions to a nucleotide sequence selected from the group consisting of SEQ ID NO:6, SEQ ID NO:9, SEQ ID NO:11, the complement of \$EQ ID NO:6, the complement of SEQ ID NO:9, and the complement of SEQ ID NO:1

(New) The isolated nucleic acid sequence of claim 30, wherein the sequence hybridizes under high stringency conditions to SEQ ID NO:6 or the complement of SEQ ID NO:6.

32. (New) The isolated nucleic acid sequence of claim 30, wherein the sequence hybridizes under high stringency conditions to SEQ ID NO:9 or the complement of SEQ ID NO:9.

33. (New) The isolated nucleic acid sequence of claim 30, wherein the sequence hybridizes under high stringency conditions to SEQ ID NO:11 or the complement of SEQ ID NO:11.

34. (New) The isolated nucleic acid sequence of claim 30, wherein the nucleic acid sequence or its complement encodes an amino acid sequence comprising 12 transmembrane domains, as determined by hydropathy plot analysis.

رام . 35. (New) The isolated nucleic acid sequence of claim 30, wherein the sequence is identical or complementary to at least a portion  $\phi$ f SEQ ID NO:6.

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(New) The isolated nucleic acid sequence of claim 30, wherein the sequence is identical or complementary to at least a portion of SEQ ID NO:9.

37. (New) The isolated nucleic acid sequence of claim 30, wherein the sequence is identical or complementary to at least a portion of SEQ ID NO:11.

38. (New) The isolated nucleic acid sequence of claim 30, wherein the sequence is identical or complementary to SEQ ID NO:6.

39. (New) The isolated nucleic acid sequence of claim 35, wherein the sequence comprises nucleotides 11 to 1372 of \$EQ ID NO:6.

4Q. (New) The isolated pueleic acid sequence of claim 38, comprising SEQ ID NO:6.

(New) The isolated nucleic acid sequence of claim 30, wherein the nucleic acid sequence encodes SEQ ID NO.7.

42. (New) The isolated nucleic acid sequence of claim 30, wherein the nucleic acid sequence encodes SEQ ID NO:10.

43. (New) The isolated nucleic acid sequence of claim 30, wherein the nucleic acid sequence encodes SEQ ID NO:12.

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(New) The isolated nucleic acid sequence of claim 41, wherein the amino acid sequence is SEQ ID NO:7.

45. (New) The isolated nucleic acid sequence of claim 30, wherein expression of the sequence is increased in a mammal in response to hyperglycemia or insulinopenia.

46. (New) The isolated nucleic acid sequence of claim 30, wherein the nucleic acid sequence is RNA.

47. (New) The isolated nucleic acid sequence of claim 46, wherein the RNA is mRNA.

48. (New) The isolated nucleic acid sequence of claim 30, wherein the nucleic acid sequence is DNA.

(New) The isolated nucleic acid/sequence of claim 48, wherein the nucleic acid sequence is cDNA.

50. (New) A probe comprising the nucleic acid sequence of claim 30, wherein the nucleic acid sequence is labeled.

51. (New) The probe of claim 50, wherein the nucleic acid sequence is labeled with a radioactive label.

(00) **§**2. (New) A vector comprising the nuclei acid sequence of claim 48.